



Leeds Assembly

September 3, 1987

Mr. Michael Sanderson
Chief, RCRA Branch
U.S. Environmental Protection Agency
Region VII
726 Minnesota Ave.
Kansas City, Kansas 66101

RECEIVED

SEP 11 1987

USEPA, RCRA Branch

Dear Sir:

This letter and the attachments is in response to the U. S. Environmental Protection Agency Region VII "Notice of Violation" dated September 2, 1987. The "Notice of Violation" alleged noncompliance with 40 CFR 268.7(a). The corrective actions described in this letter and its attachments were implemented by General Motors BOC Leeds Plant on September 2, 1987 to comply with the requirements of 40 CFR 268.7 (a).

EPA NOTED DISCREPANCY: 40 CFR 268.7 (a)

" The generator has not notified the recycling facility that they are managing a restricted waste and did not specify the treatment standard."

CORRECTIVE ACTION:

Effective September 2, 1987, the General Motors - Leeds plant will, with each shipment of waste solvent, send to the receiving facility a notice that identifies waste solvent from the Leeds Plant as a "restricted waste" and that notifies them of the appropriate treatment standard as set forth in 40 CFR 268 Subpart D. The notice will include the following information:

- 1) EPA Hazardous Waste Number,
- 2) The corresponding treatment standard, and all applicable prohibitions set forth in 268.32 or RCRA section 3004 (d).
- 3) The manifest number associated with the shipment of waste,
- 4) Waste analysis data, where available.

Please note that items 1) and 3) are currently sent with each waste solvent shipment, and that item 4) has been forwarded to the receiving

Buick-Oldsmobile-Cadillac Group

General Motors Corporation 6817 Stadium Drive Kansas City, Missouri 6



R00161467

RCRA RECORDS CENTER

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GM - Leeds Response to September 2, 1987 inspection

facility prior to their first-time acceptance of any waste solvent generated by the Leeds plant.

A sample of the 268.7 (a) notification our facility will provide is attached.


ADDITIONAL COMMENTS:

The land disposal restrictions published November 7, 1986 state that a notice, per 268.7 (a), must be provided "if a generator determines that he is managing a restricted waste under this part and the waste requires treatment prior to land disposal." Since "F005" solvent wastes from the General Motors - Leeds plant were shipped off-site for recycling and not land disposed, the 268.7 notification did not appear to apply. Enclosed is written confirmation from our solvent recycler that General Motors - Leeds Plant solvent wastes sent to them have been recycled, and have not been land disposed.

However, based upon the recently issued change in the land restriction regulation, specifically the rewording of 268.7 (a), and the interpretation of 268.7 (a) provided to Leeds Plant personnel on September 2, 1987 by the designated EPA contractors, the General Motors - Leeds plant will immediately implement the notification procedure specified by 268.7 (a) for each of our waste solvent shipments.

If there are any questions or comments regarding the corrective actions taken, please contact Ms. C. L. Johnson at the Leeds Plant, telephone 913/281-7386.

L. D. Blair, Director
Manufacturing Engineering

By 
C. L. Johnson
Plant Engineering

HYDROCARBON RECYCLERS, INC.

P.O. Box 9557 • Tulsa, Oklahoma 74157

SALES

5000 So. 45th West Ave.
Tulsa, Oklahoma 74107
(918) 445-2171

PLANT

5354 W. 46th Street South
Tulsa, Oklahoma 74107
(918) 446-7434

4 September 1987

Ms. Cindy Johnson
Buick-Olds-Cadillac Group
General Motors Corporation
Leeds Assembly
6817 Stadium Drive
Kansas City, MO 74129

Dear Cindy:

As per our telephone conversation on 3 September 1987, HRI wishes to submit this letter as official notification of the disposition of General Motors-Leeds Division F005 waste material (purge thinner).

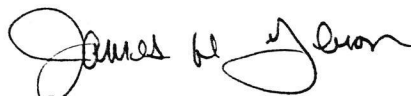
All of GM-Leeds F005 waste material has been delegated into one of two programs at HRI since the initial contract with GM-Leeds and throughout its duration over the past years. These two programs are:

- 1) Recycle Program - This material is recycled for reuse and the still bottoms are blended into kiln fuel for secondary fuel incineration.
- 2) Blended Kiln Fuel - This material is blended directly into our kiln fuel program for secondary fuel incineration.

I hope this letter will clarify any questions or concerns on the disposition of your "F" listed waste material.

If you should have any questions or need any additional information, please feel free to contact me.

Sincerely,



James H. Gibson
Sales Manager

JHG:at

SAMPLE NOTIFICATION FORM

NOTIFICATION TO "TREATMENT FACILITY"

THAT "RESTRICTED WASTE" REQUIRES "TREATMENT" PRIOR TO LAND DISPOSAL

Attention: Waste Solvent Contractor

As you know, General Motors - Leeds Plant waste solvents are currently classified as "F005" wastes (due to their toluene content), in addition to being "D001" wastes. Under the EPA land disposal restriction regulations, "F005" wastes are classified as "restricted wastes", and as such, are subject to "treatment standards" prior to land disposal. Though we ship waste solvents to your facility for recycling, not land disposal, EPA regulations require that we provide your facility with a notification of the treatment standards that would be applicable to our solvent wastes prior to their land disposal and of other applicable disposal prohibitions set forth in 40 CFR 268.32. The General Motors - Leeds Plant hereby provides your facility with such notification.

Additional information is provided below and in attachments that is also a part of the notification to your facility under 40 CFR 268.7 (a) requirements and, per this regulation, will also accompany each shipment of waste solvents from the General Motors - Leeds Plant to your facility.

PLEASE NOTE: GENERAL MOTORS - LEEDS PLANT "F005" SOLVENT WASTES SHOULD CONTINUE TO BE RECYCLED. GENERAL MOTORS - LEEDS PLANT "F005" SOLVENT WASTES MAY NOT BE LAND DISPOSED. SHOULD YOU HAVE ANY QUESTIONS, CALL THE LEEDS PLANT AT 913/281-7386.

- 1) EPA Hazardous Waste Number(s): D001 and F005
- 2) Manifest Number: To be filled in
- 3) EPA Treatment Standards, 40 CFR Part 268, Subpart D, as published ~~in the Federal Register, are attached.~~ The treatment standard for toluene, 0.33 milligrams per liter (mg/l) is currently applicable to all waste solvent shipments from the General Motors - Leeds Plant to your facility.

Specific Waste Disposal Prohibitions set forth in 40 CFR 268.32 are also attached. The prohibition against land disposal referenced in 268.32 (e)(1) and the 268.32(f) restriction are also applicable to all waste solvent shipments from the General Motors Leeds Plant to your facility.

- 4) Waste analysis data (previously submitted to your facility) for our waste solvents is again attached.

TREATMENT STANDARDS

TABLE CCWE—CONSTITUENT IN WASTE EXTRACT

F001—F005 spent solvents	Concentration (in mg/l)	
	Wastewaters containing spent solvents	All other spent solvent wastes
Acetone.....	0.05	0.59
n-Butyl alcohol.....	5.0	5.0
Carbon disulfide.....	1.05	4.81
Carbon tetrachloride.....	.05	.96
Chlorobenzene.....	.15	.05
Cresols (and cresylic acid).....	2.32	.75
Cyclohexanone.....	.125	.75
1,2-dichlorobenzene.....	.65	.125
Ethyl acetate.....	.05	.75
Ethyl benzene.....	.05	.053
Ethyl ether.....	.05	.75
Isobutanol.....	5.0	5.0
Methanol.....	.25	.75
Methylene chloride.....	.20	.96
Methylene chloride (from the pharmaceutical industry).....	12.7	.96
Methyl ethyl ketone.....	0.05	0.75
Methyl isobutyl ketone.....	0.05	0.33
Nitrobenzene.....	0.66	0.125
Pyridine.....	1.12	0.33
Tetrachloroethylene.....	0.079	0.05
Toluene.....	1.12	0.33
1,1,1-Trichloroethane.....	1.05	0.41
1,2,2-Trichloro-1,2,2-trifluoroethane.....	1.05	0.96
Trichloroethylene.....	0.062	0.091
Trichlorofluoromethane.....	0.05	0.96
Xylene.....	0.05	0.15

Subpart D—Treatment Standards

§ 268.40 Applicability of treatment standards.

A restricted waste identified in this subpart may be land disposed without further treatment only if an extract of the waste or of the treatment residual of the waste developed using the test method of Appendix I of this part does not exceed the value shown in Table CCWE of § 268.41 for any hazardous constituent listed in Table CCWE for that waste. A restricted waste for which a treatment technology is specified under § 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in § 268.42(b).

§ 268.41 Treatment Standards expressed as concentrations in waste extract.

(a) Table CCWE identifies the restricted wastes and the concentrations of their associated hazardous constituents which may not be exceeded by the extract of a waste treatment residual developed using the test method in Appendix I of this part for the allowable land disposal of such waste. (Appendix II of this part provides Agency guidance on treatment methods that have been shown to achieve the Table CCWE levels for the respective wastes. Appendix II is not a regulatory requirement but is provided to assist generators and owners/operators in their selection of appropriate treatment methods.)

F020—F023 and F026—F028 dioxin containing wastes	Concentration
HxCDD—All Hexachlorodibenzo-p-dioxins.....	< 1 p.p.b.
HxCDF—All Hexachlorodibenzofurans.....	< 1 p.p.b.
PxCDD—All Pentachlorodibenzo-p-dioxins.....	< 1 p.p.b.
PxCDF—All Pentachlorodibenzofurans.....	< 1 p.p.b.
TCCDD—All Tetrachlorodibenzo-p-dioxins.....	< 1 p.p.b.
TCDF—All Tetrachlorodibenzofurans.....	< 1 p.p.b.
2,4,5-Trichlorophenol.....	< 0.05 p.p.m.
2,4,6-Trichlorophenol.....	< 0.05 p.p.m.
2,3,4,6-Tetrachlorophenol.....	< 0.10 p.p.m.
Pentachlorophenol.....	< 0.01 p.p.m.

(b) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

§ 268.42 Treatment standards expressed as specified technologies.

(a) The following wastes must be treated using the identified technology or technologies, or an equivalent method approved by the Administrator.

(1) [Reserved]

(b) Any person may submit an application to the Administrator demonstrating that an alternative treatment method can achieve a level of performance equivalent to that achieved by methods specified in paragraph (a) of this section. The applicant must submit information demonstrating that his treatment method will not present an unreasonable risk to human health or the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a

level of performance equivalent to that achieved by methods specified in paragraph (a) of this section. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such certification is issued must comply with all limitations contained in such determination.

§ 268.43 Treatment standards expressed as waste concentrations. [Reserved]

§ 268.44 Variance from a treatment standard.

(a) Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste cannot be treated to the specified level, or where the treatment technology is not appropriate to the waste, the generator or treatment facility may petition the Administrator for a variance from the treatment standard. The petitioner must demonstrate that because the physical or chemical properties of the waste differs significantly from wastes analyzed in developing the treatment standard, the waste cannot be treated to specified levels or by the specified methods.

(b) Each petition must be submitted in accordance with the procedures in § 260.20.

(c) After receiving a petition for variance from a treatment standard, the Administrator may request any additional information or samples which he may require to evaluate the petition. Additional copies of the complete petition may be requested as needed to send to affected states and Regional Offices.

(e) The Administrator will give public notice in the Federal Register of the intent to approve or deny a petition and provide an opportunity for public comment. The final decision on a variance from a treatment standard will be published in the Federal Register.

(f) A generator, treatment facility, or disposal facility that is managing a waste covered by a variance from the treatment standards must comply with the waste analysis requirements for restricted wastes found under § 268.7.

(g) During the petition review process, the applicant is required to comply with all restrictions on land disposal under this part once the effective date for the waste has been reached.

June 4, 1987 Treatment Standards Revision

§ 268.41 [Corrected]

71. On page 40642, first column, in the section heading for § 268.41, "Standards" should read "standards".

72. On page 40642, first column, thirteenth line from the bottom, "extract of a waste treatment" should read "extract of a waste or waste treatment".

73. On page 40642, second column, the title of the table should read "TABLE CCWE—CONSTITUENT CONCENTRATIONS IN WASTE EXTRACT".

74. On page 40642, second column, in Table CCWE, "1,2-dichlorobenzene" should read "1,2-Dichlorobenzene".

75. On page 40642, second column, in Table CCWE, "Ethyle benzene" should read "Ethylbenzene".

76. On page 40642, second column, in TABLE CCWE, "1,2,2-Trichloro-1,2,2-trifluoroethane" should read "1,1,2-Trichloro-1,2,2-Trifluoroethane".

77. On page 40642, third column, in § 268.44, paragraph (c) should be redesignated as paragraph (d), and a new paragraph (c) should be added to read as follows:

“(c) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that these are significant penalties for submitting false information, including the possibility of fine and imprisonment.

July 8, 1987 Treatment Standard Revision

Subpart D—Treatment Standards

12. Section 268.40 is revised to read as follows:

§ 268.40 Applicability of treatment standards.

(a) A restricted waste identified in this subpart may be land disposed without further treatment only if an extract of the waste or of the treatment residue of the waste developed using the test method in Appendix I of this part does not exceed the value shown in Table CCWE of § 268.41 for any hazardous constituent listed in the Table CCWE for that waste.

(b) A restricted waste for which a treatment technology is specified under § 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in § 268.42(b).

13. In § 268.42, paragraph (a) is amended by adding paragraphs (a)(1) and (a)(2) and paragraph (b) is revised to read as follows:

§ 268.42 Treatment standards expressed as specified technologies.

(a) * * *

(1) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm but less than 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70 or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60. Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70. Thermal treatment under this section must also be in compliance with applicable regulations in Parts 264, 265, and 266.

(2) Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/kg and liquid HOC-containing wastes that are prohibited under § 268.32(e)(1) of this part must be incinerated in accordance with the requirements of Part 264 Subpart O or Part 265 Subpart O. These treatment standards do not apply where the waste is subject to a Part 268 Subpart C treatment standard for a specific HOC

July 8, 1987 Treatment Standard Revision, continued

(such as a hazardous waste chlorinated solvent for which a treatment standard is established under § 268.41(a)).

(b) Any person may submit an application to the Administrator demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achievable by methods specified in paragraph (a) of this section. The applicant must submit information demonstrating that his treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in paragraph (a) of this section. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such approval is issued must comply with all limitations contained in such a determination.

14. In § 268.50, paragraphs (a) introductory text, and (e) are revised and paragraph (f) is added to read as follows:

§ 268.50 Prohibitions on storage of restricted wastes.

(a) Except as provided in this section, the storage of hazardous wastes restricted from land disposal under Subpart C of this part of RCRA section 3004 is prohibited, unless the following conditions are met:

(e) The prohibition in paragraph (a) of this section does not apply to hazardous wastes that meet the treatment standards specified under §§ 268.41, 268.42, and 268.43 or the treatment standards specified under the variance in § 268.44, or, where treatment standards have not been specified, is in compliance with the applicable prohibitions specified in § 268.32 or RCRA section 3004.

(f) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of 40 CFR 761.65(b) and must be removed from storage and treated or disposed as required by this part within one year of the date when such wastes are first placed into storage. The provisions of paragraph (c) of this section do not apply to such PCB wastes prohibited under § 268.32 of this part

15. After Subpart E, Appendix III is added to Part 268 to read as follows:

Appendix III to Part 268—List of Halogenated Organic Compounds Regulated Under § 268.32

In determining the concentration of HOCs in a hazardous waste for purposes of the § 268.32 land disposal prohibition, EPA has defined the HOCs that must be included in the calculation as any compounds having a carbon-halogen bond which are listed in this Appendix (see § 268.2). Appendix III to Part 268 consists of the following compounds:

Volatiles

Bromodichloromethane
Bromomethane
Carbon Tetrachloride
Chlorobenzene
2-Chloro-1,3-butadiene
Chlorodibromomethane
Chloroethane
2-Chloroethyl vinyl ether
Chloroform
Chloromethane
3-Chloropropene
1,2-Dibromo-3-chloropropane
1,2-Dibromomethane
Dibromomethane
Trans-1,4-Dichloro-2-butene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
Trans-1,2-Dichloroethene
1,2-Dichloropropane
Trans-1,3-Dichloropropene
cis-1,3-Dichloropropene
Iodomethane
Methylene chloride
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Tribromomethane
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichloromonofluoromethane
1,2,3-Trichloropropane
Vinyl chloride

Semivolatiles

Bis(2-chloroethoxy)ethane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl) ether
p-Chloroaniline
Chlorobenzilate
p-Chloro-m-cresol
2-Chloronaphthalene
2-Chlorophenol
3-Chloropropionitrile
m-Dichlorobenzene
o-Dichlorobenzene
p-Dichlorobenzene
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
2,6-Dichlorophenol
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Hexachloropropene
Hexachloropropene
4,4'-Methylenebis(2-chloroaniline)
Pentachlorobenzene

Pentachloroethane
Pentachloronitrobenzene
Pentachlorophenol
Pronamide
1,2,4,5-Tetrachlorobenzene
2,3,4,6-Tetrachlorophenol
1,2,4-Trichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
Tris(2,3-dibromopropyl)phosphate

Organochlorine Pesticides

Aldrin
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC
Chlordane
DDD
DDE
DDT
Dieldrin
Endosulfan I
Endosulfan II
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
Isodrin
Kepone
Methoxychlor
Toxaphene

Phenoxyacetic Acid Herbicides

2,4-Dichlorophenoxyacetic acid
Silvex
2,4,5-T

PCBs

Aroclor 1016
Aroclor 1221
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
PCBs not otherwise specified

Dioxins and Furans

Hexachlorodibenzo-p-dioxins
Hexachlorodibenzofuran
Pentachlorodibenzo-p-dioxins
Pentachlorodibenzofuran
Tetrachlorodibenzo-p-dioxins
Tetrachlorodibenzofuran
2,3,7,8-Tetrachlorodibenzo-p-dioxin

40 CFR 268.32 PROHIBITIONS

11. In Subpart C, § 268.32 is added to read as follows:

§ 268.32 Waste specific prohibitions—California list wastes.

(a) Effective July 8, 1987, the following hazardous wastes are prohibited from land disposal (except in injection wells):

(1) Liquid hazardous wastes having a pH less than or equal to two (2.0);

(2) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm;

(3) Liquid hazardous wastes that are primarily water and contain halogenated organic compounds (HOCs) in total concentration greater than or equal to 1,000 mg/l and less than 10,000 mg/l HOCs.

(b)-(c) [Reserved]

(d) The requirements of paragraph (a) of this section do not apply until November 8, 1988 where the wastes are contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act or a corrective action required under RCRA Subtitle C.

(e) Effective July 8, 1989, the following hazardous wastes are prohibited from land disposal (subject to any regulations that may be promulgated with respect to disposal in injection wells):

(1) Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1,000 mg/l and are not prohibited under paragraph (a)(3) of this section; and

(2) Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1,000 mg/kg.

(f) Between July 8, 1987 and July 8, 1989, the wastes described in paragraphs (e)(1) and (e)(2) of this section may be disposed of in a landfill or surface impoundment only if the facility is in compliance with the requirements specified in § 268.5(h)(2).

(g) The requirements of paragraphs (a) and (e) of this section do not apply if:

(1) Persons have been granted an exemption from a prohibition pursuant to a petition under § 268.6, with respect to those wastes and units covered by the petition (except for liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 500 ppm which are not eligible for such exemptions); or

(2) Persons have been granted an extension to the effective date of a prohibition pursuant to § 268.5, with respect to those wastes covered by the extension; or

(3) The wastes meet the applicable standards specified in Subpart D of this part or, where treatment standards are not specified, the wastes are in compliance with the applicable prohibitions set forth in this section or RCRA section 3004(d).

(h) The prohibitions and effective dates specified in paragraphs (a)(3) and (e) of this section do not apply where the waste is subject to a Part 268 Subpart C prohibition and effective date for a for a specified HOC (such as a hazardous waste chlorinated solvent, see e.g., § 268.30(a)).

(i) To determine whether or not a waste is a liquid under paragraphs (a) and (e) of this section and under RCRA section 3004(d), the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," EPA Publication No. SW-846.

(j) Except as otherwise provided in this paragraph, the waste analysis and recordkeeping requirements of § 268.7 are applicable to wastes prohibited under this Part or RCRA section 3004(d):

(1) The initial generator of a liquid hazardous waste must test his waste (not an extract or filtrate) in accordance with the procedures specified in § 261.22(a)(1), or use knowledge of the waste, to determine if the waste has a pH less than or equal to two (2.0). If the liquid waste has a pH less than or equal to two (2.0), it is restricted from land disposal and all requirements of Part 268 are applicable, except as otherwise specified in this section.

(2) The initial generator of either a liquid hazardous waste containing polychlorinated biphenyls (PCBs) or a liquid or nonliquid hazardous waste containing halogenated organic compounds (HOCs) must test his waste (not an extract or filtrate), or use knowledge of the waste, to determine whether the concentration levels in the waste equal or exceed the prohibition levels specified in this section. If the concentration of PCBs or HOCs in the waste is greater than or equal to the prohibition levels specified in this

section, the waste is restricted from land disposal and all requirements of Part 268 are applicable, except as otherwise specified in this section.

WASTE ANALYSES



RESEARCH • DEVELOPMENT • TESTING

CLIENT: General Motors Corporation
6817 Stadium Drive
Kansas City, MO 64129
ATTN: Mr. L. Pemberton
RECEIVED: May 20, 1985 (8:15 am)
COMPLETED: July 19, 1985
LLI NO.: 85-5988
P. O. NO.: LE 24053

Sample Description: Liquid


Sample
Identification

Waste Thinner

Analysis

Results

BTU/lb 18,000 BTU/lb
Organic Chloride 2,300 mg/kg
Ash 0.08%
Physical State Liquid
Appearance Black w/Silver
Metallic Part
Odor Aromatic & Aliphatic
Hydrocarbons
Water Solubility < 10%
Specific Gravity 0.851
Vapor Pressure 0.6 psi
Volatiles at 100°C 88.80%
Volatiles at 600°C 99.92%
Boiling Point 79°C
pH 3.2
Flash Point 40°F
Cyanide < 0.10 mg/kg
Sulfide < 2 mg/kg
Phenols 77 mg/kg

Approved: 

Alan Kerschen
Vice President

Sample Description: Liquid

Sample
Identification

Waste Thinner

Analysis

EP Toxicity

Arsenic

Barium

Cadmium

Chromium

Lead

Mercury

Selenium

Silver

Results

< 1.0 mg/liter

< 5.0 mg/liter

< 0.2 mg/liter

< 1.0 mg/liter

2.1 mg/liter

< 0.05 mg/liter

< 1.0 mg/liter

< 1.0 mg/liter

S A M P L E